

Applic. No.: 10/806,514

Amdt. Dated November 28, 2005

Reply to Office action of August 29, 2005

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-18 remain in the application. Claims 1 and 6 have been amended. Claims 9-18 have been withdrawn.

In deference to the election/restriction requirement on pages 2-3 of the Office action, Applicants confirm the election of Group I, claims 1-8, for prosecution at this time. Rejoinder of withdrawn method claims 9-18 is requested upon allowance of the product claims 1-8. Applicants also reserve the right to file a divisional application for the non-elected claims.

In item 5 on pages 3-4 of the above-identified Office action, claims 1 and 6 have been rejected as being indefinite under 35 U.S.C. § 112, second paragraph.

More specifically, the Examiner has stated that it is unclear as to what applicant means by "carbonized coating being a carbonization product" as claimed in claim 1 and "carbonized coating" as claimed in claim 6.

It is noted that the Examiner's interpretation that the coating is added to the carbon fibers and then carbon fibers

Applic. No.: 10/806,514
Amdt. Dated November 28, 2005
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with the coating are carbonized is correct. The language of claims 1 and 6 has been modified to reflect this interpretation.

It is accordingly believed that the claims meet the requirements of 35 U.S.C. § 112, second paragraph. Should the Examiner find any further objectionable items, counsel would appreciate a telephone call during which the matter may be resolved. The above-noted changes to the claims are provided solely for cosmetic and/or clarificatory reasons. The changes are neither provided for overcoming the prior art nor do they narrow the scope of the claims for any reason related to the statutory requirements for a patent.

In item 6 on page 4 of the above-mentioned Office action, claims 1 and 4-5 have been rejected as being anticipated by Chuoku (GB 1 548 046) under 35 U.S.C. § 102(b).

In item 11 on page 5 of the above-mentioned Office action, claims 2 and 6 have been rejected as being unpatentable over Chuoku in view of Handbook of Carbon, Graphite, Diamond and Fullerenes - Properties, Processing and Applications (see, chapter 8, Table 8.6, page 191 - hereinafter "Handbook") under 35 U.S.C. § 103(a).

Applic. No.: 10/806,514

Amdt. Dated November 28, 2005

Reply to Office action of August 29, 2005

In item 15 on page 6 of the above-mentioned Office action, claim 8 has been rejected as being unpatentable over Chuoku in view of Lewis et al. (US 5,413,738) under 35 U.S.C. § 103(a).

In item 18 on page 7 of the above-mentioned Office action, claim 3 has been rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Chuoku.

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for:

A connecting piece for carbon material electrodes, comprising: a connecting piece body, carbon fibers in said connecting piece body, said carbon fibers having oxidatively activated surfaces, and a coating added to said carbon fibers, said coating being carbonized as a carbonization product of a coating material selected from the group consisting of wax, pitch, natural resins, thermoplastic polymers, and thermosetting polymers.

Applic. No.: 10/806,514

Amdt. Dated November 28, 2005

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Chuoku describes using (see page 2, lines 61-65) non-fusible organic fibers obtained by heating starting organic fibers to a comparatively low temperature to render them non-fusible or fire resistant as additive to their green mass (i.e. mixture of coke and carbonaceous binder). In the particular case of PAN-based fibers (see page 2, lines 122 and following), the manufacturing of such non-fusible organic fibers is more specifically defined.

As can be clearly seen in Handbook (see pages 176-177), Chuoku describes the use of so-called oxidatively stabilized PAN-fibers (also called PANOX fibers), which is an intermediate product in the manufacturing of carbon fibers. Even further, Chuoku teaches in the disadvantages of the prior art (see page 1, lines 92 and following) that carbon fibers are expensive because they have to be manufactured via the "PANOX" step, followed by carbonization and graphitization. Hence, Chuoku describes the use of PANOX fibers, but not the use of (treated) carbon fibers. Chuoku even teaches carbon fibers as disadvantageous prior art.

Further, Chuoku teaches in the disadvantages of the prior art (see page 2, lines 21 to 35) that carbon fibers behave remarkably different in the coke and binder matrix and hence impairing the reinforcing effect. This is the very

Applic. No.: 10/806,514

Amdt. Dated November 28, 2005

Reply to Office action of August 29, 2005

disadvantage having been overcome by the invention of the instant application.

It should also be noted that (see also Handbook, pages 177-178) the suggested use of PANOX fibers according to Chuoku will result in evolution of various volatiles during carbonization and graphitization resulting disintegration of the "in situ" generated carbon fibers and, even worse, cracking of the carbon/graphite body. Hence, the suggested use of PANOX fibers according to Chuoku is rather weakening the strength of carbon/graphite electrodes.

Clearly, Chuoku does not show "carbon fibers in said connecting piece body," as recited in claim 1 of the instant application.

Claim 1 is, therefore, believed to be patentable over Chuoku and since all of the dependent claims are dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-8 are solicited. Rejoinder of method claims 9-18 is requested upon allowance of product claims 1-8 under MPEP 821.04 ("if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn

Applic. No.: 10/806,514

Amdt. Dated November 28, 2005

Reply to Office action of August 29, 2005

process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined").

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 (to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

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For Applicants

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November 28, 2005

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